

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of manufacture of an automobile structure comprising the steps of:

forming in a die a plurality of castings each having at least one socket;

forming a plurality of metallic rails; and

fixing the metallic rails in the sockets of the castings in order to construct the automobile structure[.];

forming at least one of the castings initially with a plurality of differently sized features, each feature capable of defining a plurality of differently sizes of sockets;

selecting a size of cross-section of a metallic rail; and

machining the said at least one casting to provide the casting with a socket of a size appropriate for the selected metallic rail.

2. (Original) A method as claimed in claim 1 wherein:

four of the castings are formed which in the finished structure are located one each at the four corners of a generally rectangular cabin of the automobile; and

two of the metallic rails are side rails which extend longitudinally parallel to each other on opposite sides of the cabin each between a different pair of castings, each side rail being fixed at each end in socket of a casting.

3. (Cancelled).

4. (Original) A method as claimed in claim 2 wherein each of the plurality of metallic rails is formed from an extrusion.

5. (Original) A method as claimed in claim 1 comprising fixing the metallic rails in the sockets by bonding with adhesive.

6. (Original) A method as claimed in claim 5 wherein the metallic rails are initially secured in place in the sockets by mechanical fasteners and then adhesive is injected in gaps left between the rails and the sockets.
7. (Original) A method as claimed in claim 1, wherein each socket formed in each casting is open in two perpendicular directions.
8. (Original) A method as claimed in claim 7 wherein a closing plate is used to complete each socket.
9. (Withdrawn) A method as claimed in claim 5, comprising:
 - forming in at least one of the castings a socket having a pair of parallel spaced apart planar surfaces extending between side walls common to both;
 - forming a rectangular cross-section hollow metal rail;
 - cutting away three of the four walls from an end section of the hollow metal rail to leave exposed a planar surface which was originally an interior surface of the hollow metal rail; and
 - adhering the exposed planar surface of the metal rail to one of the parallel spaced apart planar surfaces of the casting and adhering to the other planar surface of the casting a part of an exterior surface of the hollow rail which is parallel to and spaced apart from the exposed planar surface of the hollow rail.
10. (Original) A method as claimed in claim 1 wherein each metallic rail is formed from steel by pressing and/or folding.
11. (Original) A method as claimed in claim 10 comprising fixing the metallic rails in the sockets by welding.
12. (Original) A method as claimed in claim 10 wherein each socket formed in each casting is open in two perpendicular directions.

13. (Original) A method as claimed in claim 12 wherein a closing plate is welded to each casting to complete each socket.
14. (Withdrawn) A method as claimed in claim 11, comprising:
forming in at least one of the castings a socket having a pair of parallel spaced apart planar surfaces extending between side walls common to both;
forming a rectangular cross-section hollow metal rail;
cutting away three of the four walls from an end section of the hollow metal rail to leave exposed a planar surface which was originally an interior surface of the hollow metal rail; and
welding the exposed planar surface of the metal rail to one of the parallel spaced apart planar surfaces of the casting and welding to the other planar surface of the casting a part of an exterior surface of the hollow rail which is parallel to and spaced apart from the exposed planar surface of the hollow rail.
15. (Currently amended) A method as claimed in claim 1 wherein at least one metallic rail is formed as an ~~open-section~~ L-shaped rail and in the method a cover plate is fixed to the ~~open-section~~ L-shaped metallic rail to close the section.
16. (Currently amended) A method as claimed in claim 15 wherein the ~~open-section~~ L-shaped rail is fixed additionally to a floor panel and the cover plate is fixed to both the floor panel and the metallic rail in order to form a closed-section structure extending along a side of the vehicle.
17. (Withdrawn) An automobile comprising a chassis formed by the method of claim 1, the chassis providing the primary structural rigidity of the vehicle and the automobile having exterior body panels overlaying the chassis.
18. (Withdrawn) An automobile as claimed in claim 17 which has a cabin with a diamond shaped floor pan and seats for a driver and three passengers; a driver's seat located forward of the other seats and centrally widthwise of the vehicle; two passengers' seats located rearwardly of the driver's seat and each spaced transversely outwardly from the driver's seat;

and a fourth passenger seat located rearwardly of the other three seats and directly behind the driver's seat.

19. (Cancelled).

20. (Cancelled).

21. (Original) A method as claimed in claim 2 which additionally comprises:

forming at least one of the castings initially
with features capable of defining a plurality of
different sizes of sockets;
selecting a size of cross-section of a metallic rail; and
machining the said at least one casting to provide the casting with a socket of a size
appropriate for the selected metallic rail.

22. (Original) A method as claimed in claim 21 wherein each of the plurality of metallic
rails is formed from an extrusion.

23. (Original) A method as claimed in claim 22 comprising fixing the metallic rails in the
sockets by bonding with adhesive.

24. (Original) A method as claimed in claim 23 wherein the metallic rails are initially
secured in place in the sockets by mechanical fasteners and then adhesive is injected in gaps
left between the rails and the sockets.

25. (Currently amended) A method as claimed in claim ~~[[20]]~~ 21, wherein each socket
formed in each casting is open in two perpendicular directions.

26. (Original) A method as claimed in claim 25 wherein a closing plate is used to
complete each socket.

27. (Withdrawn) A method as claimed in claim 23, comprising:

forming in at least one of the castings a socket having a pair of parallel spaced apart planar surfaces extending between side walls common to both;

forming a rectangular cross-section hollow metal rail;

cutting away three of the four walls from an end section of the hollow metal rail to leave exposed a planar surface which was originally an interior surface of the hollow metal rail; and

adhering the exposed planar surface of the metal rail to one of the parallel spaced apart planar surfaces of the casting and adhering to the other planar surface of the casting a part of an exterior surface of the hollow rail which is parallel to and spaced apart from the exposed planar surface of the hollow rail.

28. (Original) A method as claimed in claim 2 wherein each metallic rail is formed from steel by pressing and/or folding.

29. (Original) A method as claimed in claim 28 comprising fixing the metallic rails in the sockets by welding.

30. (Original) A method as claimed in claim 28 wherein each socket formed in each casting is open in two perpendicular directions.

31. (Original) A method as claimed in claim 30 wherein a closing plate is welded to each casting to complete each socket.

32. (Withdrawn) A method as claimed in claim 31, comprising:

forming in at least one of the castings a socket having a pair of parallel spaced apart planar surfaces extending between side walls common to both;

forming a rectangular cross-section hollow metal rail;

cutting away three of the four walls from an end section of the hollow metal rail to leave exposed a planar surface which was originally an interior surface of the hollow metal rail; and

welding the exposed planar surface of the metal rail to one of the parallel spaced apart planar surfaces of the casting and welding to the other planar surface of the casting a part of

an exterior surface of the hollow rail which is parallel to and spaced apart from the exposed planar surface of the hollow rail.

33. (Currently amended) A method as claimed in claim 2 wherein at least one metallic rail is formed as an ~~open-section~~ L-shaped rail and in the method a cover plate is fixed to the ~~open-section~~ L-shaped metallic rail to close the section L.

34. (Currently amended) A method as claimed in claim 33 wherein the ~~open-section~~ L-shaped rail is fixed additionally to a floor panel and the cover plate is fixed to both the floor panel and the metallic rail in order to form a closed-section structure extending along a side of the vehicle.

35. (Withdrawn) An automobile comprising a chassis formed by the method of claim 2, the chassis providing the primary structural rigidity of the vehicle and the automobile having exterior body panels overlaying the chassis.

36. (Withdrawn) An automobile as claimed in claim 35 which has a cabin with a diamond shaped floor pan and seats for a driver and three passengers; a driver's seat located forward of the other seats and centrally widthwise of the vehicle; two passengers' seats located rearwardly of the driver's seat and each spaced transversely outwardly from the driver's seat; and a fourth passenger seat located rearwardly of the other three seats and directly behind the driver's seat.

37. (Cancelled).

38. (Cancelled).